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Cognitive Therapy Protocol for Dementia Management

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Running Head: COGNITIVE THERAPY PROTOCOL

Master's Scholarly Project

Cognitive Therapy Protocol for Dementia Management

The Occupational Therapy Department

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CHAPTER I

Introduction

Gales Encyclopedia of Medicine defines dementia as a group of symptoms that causes gradual death of the brain cells (Robinson, 1999). Seventy million people worldwide age 80 or older were affected with dementia in 1998. It is predicted that this number will increase to 370 million people by the year 2050 (Schultz, 2000). Dementia is quickly becoming an epidemic among older adults.

Dementia significantly affects an individuals function and safety as evidenced by poor judgment, impaired abstraction and planning, language and comprehension disturbances, decreased attention and increased restlessness, memory losses, and impaired orientation ability (Robinson, 1999). Karen Warchol (2000) identified the main difficulties in treating clients with dementia as deficits in new learning, impairments in communication skills, and negative behavior. Negative behavior is defined as any behavior that is disruptive to the therapeutic environment. A review of literature identified possible occupational therapy (OT) assessment and intervention approaches that can be used to treat individuals with dementia. A protocol for treatment of dementia patients was developed using Allen's Cognitive Disability Model

Cognitive therapy services may provide a holistic approach to treatment of clients with dementia. Utilizing a cognitive therapy approach such as Allen's Cognitive Disability Model, allows OT's to identify cognitive abilities and deficits, develop treatment plans to emphasize remaining abilities while compensating for deficits, write realistic goals, and demonstrate increases in functional levels and safety (Warchol, 2000).

CHAPTER II

Review of Literature

Seventy million people worldwide age 80 or older were affected with dementia in 1998. This number is predicted to increase to 370 million people by the year 2050 (Schultz, 2000). Individuals who suffer from this syndrome live an average of eight years after early diagnosis, and may live as many as 20 years after symptoms are first noticed (American Association for Geriatric Psychiatry, 2002).

Dementia is a group of symptoms that result from gradual death of brain cells. Dementia is typically caused by degeneration of cells in the cerebral cortex, which is the part of the brain responsible for thoughts, memories, actions, and personality. Death of brain cells in the cerebral cortex leads to the cognitive impairments that characterize dementia (Robinson, 1999). There are a variety of disorders that may be associated with dementia. The most common disorder that causes dementia is Alzheimer's disease (AD). This disease involves a loss of nerve cells in the areas of the brain that are vital to memory and various other mental functions (Mayo Clinic, 2003).

“Dementia is a syndrome characterized by (1) a decrease in cognition from a previously higher level; (2) the emergence of behavioral disturbances; and (3) interference with daily function and independence” (Knopman, 1998, p.2S). Common signs and symptoms associated with dementia are listed below, however, it is important to note that not everyone will demonstrate the same signs and symptoms.

- Memory loss – This is one of the first symptoms noticed. Memory loss may begin with misplacing items such as wallets or car keys then progress to forgetting how to return home, appointments, and where the car is parked (Robinson, 1999).

Individuals with dementia often forget things, but they never remember them. They also are unable to recall what has been forgotten (American Academy of Family Physicians, 2001).

- Impaired abstraction and planning – Persons with dementia may lose the ability to complete familiar tasks, plan activities, and draw simple conclusions from facts (Robinson, 1999). An individual may cook a meal but forget to serve it or even forget that they prepared a meal.

- Language and comprehension disturbances – It may become difficult for people suffering from dementia to understand instructions, or to follow a logic moderately complex sentence. As the syndrome progresses it may be difficult for individuals to understand their own sentences and have difficulty forming thoughts into words (Robinson, 1999).

- Impaired Orientation – This impairment may stem from losses of memory and partly from impaired abstraction (Robinson, 1999). Individuals affected with dementia might become lost on their own street and demonstrate confusion as to how they got there and how to return home.

- Decreased judgment – Individuals may be unaware of the consequences of their actions or be unable to conform to social expectations. Behavior may become inappropriate for a particular setting and individuals may forget that they are watching a grandchild and simply leave the home (American Academy of Family Physicians, 2001)

- Decreased attention and increased restlessness – Dementia patients may begin an activity and quickly lose interest and wander away (Robinson, 1999).

- Personality changes – As the disease progresses, drastic personality changes may become obvious. Individuals may grow to be increasingly irritable, suspicious or fearful (American Academy of Family Physician, 2001). Persons with dementia may lose interest in activities that they once enjoyed and become more passive or depressed (Robinson, 1999).

Individuals who suffer from dementia begin with mild cognitive impairments and slowly progress to more severe cognitive changes. Appendix A describes the three stages of dementia. Some of the previous signs and symptoms can be referred to as negative behaviors. Negative behaviors are defined as any behavior that is disruptive to the therapeutic environment. These include hostility, withdrawal from activity, aggression, agitation, insomnia, and wandering.

The following is a review of the literature examining various assessment and treatment interventions utilized in dementia management that may be used by an occupational therapist (OT). The OT can be involved in dementia management in a variety of settings, which include long term care facilities, senior centers, and home care (Macdonald, 1986). The focus of this literature review will be on interventions and assessments that can be utilized in long term care settings.

Role of Occupational Therapy

Individuals who suffer from dementia demonstrate decreased skill in the cognitive, motor, sensory integrative, social, and psychological areas of functioning. “These areas of dysfunction affect occupational performance in self care, work, and leisure” (Macdonald, 1986). OT educational background in biological, behavioral, and neurosciences and their relationships, activity analysis, sensorimotor, cognitive, and

psychosocial components of humans, and the importance of environment, provides the means for the OT to make a crucial contribution to services that are offered to persons with dementia (AOTA, 1999). Individuals affected with dementia can participate in assessments that will assist the OT in understanding the extent of impairment being faced in self-care, work, and leisure.

OT's have the option of utilizing standardized and non-standardized assessments when examining an individual's functional status (Macdonald, 1986). OT assessment and intervention should be directed toward adapting the person's skill level to enhance their performance/participation in meaningful occupations. The assessment process provides a description of what the individual can or cannot do safely. This process provides information for further assessment as well as goals for intervention (AOTA, 1999). Warchol (2000) suggests finding the strengths an individual has instead of weaknesses in order to build on the positive aspects of remaining abilities.

There are a variety of assessments that can be utilized when assessing individuals affected with dementia. These assessments address cognitive skills, performance in basic activities of daily living (BADLs), and performance in instrumental activities of daily living (IADLs). The following section describes assessments that can be utilized by OT's in long-term care settings.

Occupational Therapy Assessment Approaches

Instruments that measure functional performance in the population affected with dementia are needed to assist in monitoring disease progression and to plan appropriate intervention strategies. Changes in the functional performance of activities have been observed to decline in a hierarchical pattern. Changes often begin with the loss of tasks

that are involved in working and completing hobbies, then progress to increased difficulty in abilities to deal with finances and shopping, and finally to deterioration of ability to complete BADLs. The Disability Assessment for Dementia (DAD) was developed in order to provide an appropriate assessment of functional disability for caregivers of community-dwelling persons who are affected with dementia (Gelinas, Gauthier, McIntyre, & Gauthier, 1999).

The DAD mainly emphasizes BADLs and IADLs that caregivers consider being issues for their loved ones whom are experiencing dementia. Individuals affected with dementia who are participating in the DAD can evaluate their own performance in BADLs and IADLs. Adequate performance in BADLs and IADLs involves the ability to integrate many skills that are not evaluated by many cognitive tests such as perception, executive functions, and motivation. Cognitive impairments, particularly in memory, concentration, praxis, gnosis, initiation, self awareness, planning and organization, problem solving, abstraction, and generalization of tasks all have an impact on individuals ability to complete all ADL's (Gelinas et al., 1999).

The DAD includes two sections. Section (1) focuses on the individual's ability to complete all ADLs. BADLs that are assessed include dress, complete hygiene tasks, continence, and eating. IADLs that are assessed include meal preparation, telephone usage, housework, finances, medication routines, and safety. The final aspect of section (1) that is assessed is the individual's interest in participating in leisure activities. Section (2) examines cognitive dimensions associated with completion of BADLs and IADLs. These dimensions include initiation, planning and organization and effective performance of task completion. (Gelinas et al., 1999). The DAD can be utilized

alongside cognitive assessments to examine the abilities of individuals affected with dementia that are not addressed otherwise.

Team members at Hebrew Rehabilitation Center in Roslindale, Massachusetts developed a functional screening tool that met the following criteria: (1) a standardized scheme to assess cognitive ability, (2) separates cognitive skills into recognized components, (3) includes environmentally appropriate dimensions suitable for residents who reside in long term care settings, (4) provides information useful in treatment by outlining residents strengths and weaknesses (5) is administered in less than a half hour and (6) serves as a common language between disciplines. The new screening tool was named the Cognitive Ability Screening Test (CAST) (Korbel, 1984).

The CAST is a self administered test that can be used to screen potential patients for dementia (Drachman, 1996). The screening tool takes approximately 20 minutes to administer. Information gathered can be useful in the development of treatment plans and indicate areas that may need further assessment. The CAST examines the following areas: attention, memory, abstraction, orientation, naming objects, copying one-dimensional drawings, and word generation (Korbel, 1984). The CAST is divided into three parts. Part A includes 10 questions, which consist of writing your own name, address, and copying a simple figure. Part B includes five more demanding questions such as name the senators in your own state. Part C consists of 13 questions regarding subjective decline in memory and competence (Swearer, Drachamn, Kane, Dessureau, & Tabloski, 2002) such as “are you losing track of things that you used to know well, like family events, and news events or sports” (Drachman, 1996, p.1960). The CAST is a screening tool that OT’s can use to assist them in developing treatment plans that are

individualized to each person. For the purpose of this paper Allen's Cognitive Disability Model is considered for creating protocol interventions. The following section describes the theory and various assessments that can be utilized with the model.

Cognitive Disability Theory

Allen's Cognitive Disabilities Model provides a framework that addresses "cognitive impairment and functional disability from a multicomponent perspective that is specifically addressed to the functional and behavioral consequences of cognitive impairment". This model "proposes an information-processing model of the etiology of the functional impairment that identifies different information-processing patterns revealed by different patterns of functional performance" (Levy, 1998, p.195-221). Important cognitive components such as attention, praxis, and memory are integrated into the model, however they are included as components of information processing patterns that vary throughout Allen's hierarchy of levels (Levy).

The goal of the Cognitive Disability Model is to identify information processing abilities to determine if an individual can perform functional activities safely and successfully, as well as the extent to which cognitive impairments need to be compensated for (Levy, 1998). Allen suggested six cognitive levels to indicate variances in patterns of performance assuming that the disparities are related to differences in information processing abilities (Mayer, 1988). Task performance is a large concept addressed by the Cognitive Disability Model. The six levels are considered to symbolize information processing that is regulated by sensorimotor associations in the brain (Levy). Sensorimotor associations include the ability to sustain attention to sensory cues (input), resultant voluntary motor actions (output), and the formation of sensorimotor associations

in the brain between the sensory cue and motor action (throughput) (Mayer). Allen's six cognitive levels are described below, and can be used as guidelines to predict clients ability to complete familiar activities as well as learn new ones (David & Riley, 1990).

Level 1 Automatic actions: Individuals in this level are typically in a hospital bed with side rails to prevent them from falling. Individuals will lie still and look into space unless agitated or in pain. Minimal responses to external stimuli can be drawn out. Individuals may respond to noxious stimuli, which is typically the first response when coming out of a coma. Head turning may occur in order to locate a stimulus. These individuals are unable to hold their bodies against gravity. Information processing is very slow at this level. It could take up to several minutes to get a response from a cue, and each response to a cue will more than likely last for a moment or two. The focus of the individual in this level is on sustaining life. Pureed foods and no liquids may be attempted, but choking is a risk. Speech is limited to nonverbal responses such as crying or screaming (Allen, Earhart, & Blue, 1992).

Level 2 Postural actions: Individuals in this level are able to self-initiate motor action to stay sitting in an upright position. Individuals can sit, stand, and walk slowly, however safety will be of great concern since they might not look to see if there is a chair before sitting down. Individuals will also begin making spontaneous movements to adjust their torso to overcome the effects of gravity. Eating may be done while sitting and will typically be completed slowly, and the person may require verbal cues to continue eating until the meal is completed. At this level individuals may include nonverbal and verbal yes/no responses and single words such as their name, bed, or bathroom, (Allen et al., 1992).

Level 3 Manual actions: At this level people will use their hands to grasp and move objects. Placing objects in front of them and instructing them in what to do with the object provide stimuli. The quality of the person's performance is unreliable due to the inability to sequence themselves. Individuals may be able to complete tasks such as bathing and dressing with cues as to what the next step is, and it is important that someone is with them at all times due to safety concerns. Individuals are able to sit at the table and eat a meal without constant cuing, which is the activity that is done best at this level. Individuals are also able to recognize a goal of an activity, but recognition only occurs after the activity is completed (Allen et al.,1992).

Level 4 Goal directed actions: Individuals at this level have a goal in mind and are able to sequence themselves through the steps of an activity. At this level self care is completed independently, but may have small errors. Individuals are able to comply with directions and can function as long as there is a routine; they are inflexible and have difficulty adjusting to change. Persons at this level will pay attention to figure ground perception, striking visual cues, old effects of actions, errors, and possessions (Allen et al., 1992).

Level 5 Exploratory actions: At this level individuals are more flexible and able to better adjust to change. Individuals also learn by doing, which is essentially a trial and error method. Persons at this level are unable to anticipate the next step and see everything before making a plan of action and understanding the consequences. Impulsivity is also common. Individuals are able to work and think about how things can be made faster, easier and better. They also may put their needs before other people such

as family and friends. A person at this level also pays attention to discovering new effects caused by actions and is able to make fine motor adjustments (Allen et al., 1992).

Level 6 Planned actions: Individuals at this level stop to think, seek information, and are capable of checking the clock or following a schedule. They consider the needs of others and can anticipate and avoid mistakes secondary to planning ahead. Persons at this stage follow social expectations and are capable of admitting and correcting a mistake (Allen et al., 1992).

Allen's Cognitive Disability Model provides evaluation and assessment tools that can be utilized by the OT. Evaluation tools include the Allen Cognitive Level (ACL) test, the Routine Task Inventory (RTI), the Cognitive Performance Test (CPT) and Allen's Diagnostic Module (ADM).

The ACL can assist in identifying cognitive abilities and deficits, assist in providing customized treatment plans to each individual, assist in writing realistic goals, and demonstrate increases in functional levels and safety for clients affected by dementia (Warchol, 2000). This evaluation provides a quick approximation of an individual's current capability to learn. The ACL is a leather lacing task, which requires the individual to complete three different types of stitches. The stitches that each person is asked to complete include a running stitch, whip stitch, whip stitch cross and twist, and cordovan stitch. The whip stitch cross and twist is a mistake that is purposely made by the OT in order to see if the individual is able to find and correct the mistake made. Each stitch except for the cordovan stitch is demonstrated, and in this case each person is asked if they can figure out how to complete the cordovan stitch (Allen et al., 1992).

“The association of the ACL to other measures of cognitive function increases its usefulness in the specification of possible day to day limitations of function in psychiatric patients. Each cognitive level has capacities and limitations associated with it” (David & Riley, 1990, p. 496). Studies completed on the ACL have proven it to be a valid measure of cognitive function when compared with other measures of intellectual performance (David & Riley).

The ACL was compared to the Shipley Institute of Living Scale, which measures intellectual ability or impairment including vocabulary and abstraction; and the Symbol-Digit Modalities Test, which is a timed performance test focusing mostly on fine motor speed and concentration and incidental memory. Significant correlations were found between both of these assessments, which indicate that the ACL is a valid measure of cognitive functioning (David & Riley, 1990).

The ACL and the Wisconsin Card Sorting Test (WCST) were examined in order to study the relationship among executive functions, problem solving, and occupational function between the two assessments (Secrest, Wood, & Tapp, 2000). A significant correlation was found between the ACL and the WCST, which suggests that both measures assess cognitive functions in a comparable manner. The WCST was found to be able to predict scores on the ACL in both the number of errors made and the number of categories completed. “The ACL has a similar ability as the WCST to measure executive functions” (Secrest et al, 2000, p. 131.).

The ACL was also evaluated in comparisons to the Life Skills Profile (LSP) to examine whether the ACL was more effective than the LSP in discerning between persons living in the community and persons living in an institution. The study found a

significant to moderate relationship between the ACL and the LSP demonstrating again that the ACL is a valid predictor of functioning (Keller & Hayes, 1998).

The RTI is an evaluation that is based on observing an individual's ability to complete everyday activities. Individuals are observed to determine if there is a disability in one's ability to do self care activities such as grooming, dressing, bathing, walking and exercising, eating, toileting, taking medications and using adaptive equipment as needed. Situational awareness is also examined, which is a disturbance in the ability to understand relations between objects in situations of daily living. This includes housekeeping, preparing/obtaining food, spending money, shopping, doing laundry, traveling, telephoning, and adapting to a change (Allen et al., 1992).

The RTI also assesses one's ability to participate in routine activities that are associated with the occupation of time. This includes planning/doing major role activities such as going to work or school, planning/doing spare time activities such as leisure pursuits, pacing and timing which is the ability to regulate speed and energy in a specified amount of time, exerting effort or putting forth enough physical or mental energy to complete a task, and judging results of one's actions on material objects such as determining the correct amount of liquid needed in a cup (Allen et al., 1992).

The final section of the RTI examines the ability of the individual to interact with others. This includes communication, the ability to follow instructions, ability to contribute to family activities, ability to care for dependents, ability to cooperate with other people, ability to supervise others, ability to keep informed about situations, and the ability to engage in good citizenship (Allen et al., 1992).

The ADM provides standardized tasks for the assessment and treatment of individuals with cognitive disabilities. The ADM is designed to be used as a bridge between the ACL and the RTI to make further recommendations such as discharge plans and provide caregivers with an idea of the level of assistance needed to be safe in the environment. There are 24 craft projects available to evaluate individual's ability to process new information. Craft projects offer a cost effective instrument for evaluating ability to process new information (Earhart, Allen, & Blue, 1993).

When utilizing the ADM it is important to remember, standardized tests provide a predication by controlling certain variables. Humans function at various levels in an ever-changing environment. The ACL and the ADM only provide a prediction of an individual's ability to function. The OT may want to consider past experience with crafts, the time of the day, motivation, distractions, fatigue, and other medical conditions. (Earhart et al., 1993).

The final evaluation utilized in the cognitive disability approach is the CPT. The CPT was designed to evaluate the functional level of individuals affected with Alzheimer's disease (AD). The focus of this tool is to examine the degree to which specific impairments compromise common functional activities. The observed tasks in the CPT have implications for the performance of a wide variety of ADL's (Allen, et al., 1992).

The CPT includes six tests entitled; dress, shop, toast, telephone, wash, and travel. Recently a new medbox task has been added (Burns, 2002). Appendix B provides information about the new medbox task. Each task has a specific set of verbal instructions that are given to the individual being tested. Each test requires specific

equipment, set-up and methods of administration that involve the sequential removal or addition of sensory cues as difficulty with performance is observed (Allen et al., 1992).

Once the assessment process is completed the OT has the responsibility of developing interventions that build on the remaining abilities an individual has while improving the quality of life of the individual affected with dementia.

Occupational Therapy Intervention Approaches

OT intervention for individuals with dementia has one overall goal. This goal is to improve performance and/or participation in meaningful daily routines and activities such as self-care, work/learning and productive tasks, play, and leisure (AOTA, 1999). Macdonald (1986) suggests considering the individuals energy level and frustration tolerance when choosing intervention techniques. There are three main symptoms that may have a negative affect on the ability to achieve successful outcomes; the three symptoms include (a) deficits in new learning, (b) impairments in communication skills, and (c) negative behaviors (Warchol, 2000). These three symptoms are important to consider when planning treatment. There are a variety of strategies that can be employed to address communication deficits as well as control negative behaviors.

Warchol (2002, p.16) states that “we need to adjust our communication style to compensate for the client’s loss of communication skills by reducing the number of pronouns used, adding visual and tactile cues, and allowing extra response time after each directive or request”. Communicating with clients who have dementia may be difficult depending on which stage they are in. General approaches that can be utilized when communicating with dementia victims include speaking slowly and using direct

statements. Always face the individual and speak directly to him or her, not over the heads of others (Macdonald, 1986).

Questions that begin with “Wh” such as why, what, when, and who should be avoided due to the fact that it may be difficult for the person with dementia to process the question causing increased frustration and agitation. In the case that a client does not understand what is being asked it would be beneficial for the OT to repeat the message and then rephrase the question to eliminate as much confusion as possible. It can also be helpful to ask close ended questions rather than stating commands. Whenever possible, it will be beneficial for the OT to demonstrate what they are asking the individual to do (Macdonald, 1986), as the disease progresses it will be important to monitor the patient for non verbal responses such as breathing rate change, facial expressions, or even a grunt (Warchol, 2000). Non-verbal cues can indicate pain, frustration, or joy.

Behavioral problems may also become an issue for the OT treating dementia patients. Therapists should be compassionate, patient and should be willing to learn about dementia as well as to identify their own behaviors that may trigger negative behavior. Redirection is a commonly used technique when participating in intervention with clients who have dementia. This approach allows the therapist to divert the client’s attention from an undesired behavior and move the focus to another topic or object (Macdonald, 1986). Physical environments should also be modified to decrease external distractions such as excessive noise, light, or temperature that may cause behaviors such as agitation, aggression, and restlessness (Warchol, 2000).

The physical and social environments that a person is in often influence behavioral expression of individuals with dementia. “A stable and appropriately

organized environment can contribute to the demented person's adaptation and performance of activities in his or her environment" (Robichaud, Hebert, & Desrosiers, 1994, p. 355). Sensory Integration (SI) programs may favorably influence the behavior of clients with dementia by modifying or adapting the input being received. Sensory deprivation is most frequently experienced by individuals in institutions and is thought to be one of the causes of negative behavior in clients with dementia (Robichaud et al, 1994.). Professionals working in this type of setting may find this intervention beneficial.

The goals of a SI program are to improve the dementia victim's quality of interaction with others and to allow individuals to manipulate and use common objects in everyday life (Robichaud et al., 1994). However the OT must identify and maintain a balance between sensory deprivation and sensory overload. The following section provides ideas that can be utilized to influence individuals who are participating in SI programs (Macdonald, 1986).

- Visual – Bright colors and frantic motion can excite individuals. Figure ground difficulties should be considered and objects that are utilized in self care tasks should be voluntarily identified.

- Tactile – All objects must be safe in nature and textures may be irritating to some people. Individuals should contact textures through gentle touch, hand holding, and hugging. This can be very beneficial for individuals who have withdrawn from social interactions.

- Auditory – Confusion can be increased with attempts to discriminate between too many noises, and the OT must monitor noise levels and prevent individuals from becoming agitated.

■ Olfactory – Certain odors may draw out responses and can cause negative reactions. OT's can work with the individual to eliminate odors that cause negative reactions (Macdonald, 1986)

SI programs can be beneficial in reducing negative behaviors. Modifying or adapting the amount of sensory stimulation can favorably influence behavior making caregiving tasks less burdensome and making the environment for the individual affected with dementia more safe (Robichaud et al., 1994).

Reality Orientation (RO) is an approach that is being utilized by some professionals. However the effectiveness of this approach is unclear. Reality Orientation has been researched frequently and the research suggests that giving information about the time, the environment, and the surrounding people to individuals with dementia can increase the level of anxiety experienced (Robichaud et al., 1994). However there is conflicting research that states that individuals who received RO had significantly increased control of cognition and negative behavior (Spector ,Orrell, Davies, & Woods, 2001).

RO involves the presentation and repetition of information such as day, date, time, place, and person (Spector, Orrell, Davies, & Woods, 2000). It is thought that repetitive information may provide individuals with dementia increased awareness of their environments, which may result in improved self-esteem. Reality Orientation may slightly improve cognition and behavior. (Spector et al., 2001). Suggestions for an RO group include utilizing a calendar with the date, month, season, and year, providing individuals in the group with a large digital clock to orient them to time. It may also be helpful to utilize a room with a window to discuss the weather and time of day. Those

who are participating in the group can also share their name with other group members as well as a childhood memory they have, since many individuals with dementia have better recall of past memories.

RO is an intervention that is usually completed in groups. There are some considerations to think about when planning a group activity. These include ensuring the task is structured, concrete, and short term in nature due to the limited attention span that dementia victims have. Individuals should be provided with positive reinforcement and the activity needs to be adaptable for varying levels of cognitive status. The best activities that can be used in groups are those that are repetitive and do not have multiple steps, which makes RO an excellent choice for group intervention (Macdonald, 1986).

Primary goals for patients affected by dementia include preserving function and independence and also maximizing quality of life. “Therapeutic strategies usually change as the disease progresses and should reflect the values and wishes of the patient and family” (Fenstemacher, 2003, ¶ 21). Intervention should provide activities that are functional and contain some degree of purpose.

OT is a health profession that is based on using activity to incorporate individuals remaining abilities to their full potential (Allen, 1987). Providing those people who are affected by dementia with a management program that will increase their quality of life as well as provide greater understanding of the syndrome to caregivers will make treatment and care easier. This scholarly project will provide OT’s with a protocol on dementia management utilizing Allen’s Cognitive Disability Model as a basis for treatment and assessment. Allen’s cognitive model was chosen because of the focus on the quality of life for those clients who have dementia (Hayes & Keller, 1999). This

component makes it an appropriate choice to utilize in the assessment and intervention of dementia patients.

CHAPTER III

Activities/Methodology

The author first became interested in dementia while completing a Level II fieldwork at Beverly Health Care in Scottsbluff, NE. The author had a case load that consisted of many clients who were suffering from dementia. The theory base that was utilized to treat dementia patients was the Cognitive Disability Model, however was only partially employed. It is the goal of this scholarly project to provide OT's with a comprehensive client centered approach to treat dementia patients within the Cognitive Disability Model.

During the summer of 2003 the author began researching the Cognitive Disability Model. Sources were utilized from books by Claudia Allen, internet sites dedicated to this particular theory, information that Beverly Health Care obtained, Harley French Medical Library , and the Casper College library, as well as various professional journals. In the fall of 2003 the author continued to gather resources and began to complete a literature review that examined a variety of treatment methods that were used to treat clients with dementia. During this process it was discovered that many interventions overlapped and that the best treatment approach depended on the clients needs as well as what the therapist was comfortable utilizing for intervention.

During this same time period the author completed a protocol that can be utilized by entry level and experienced professionals. It is hoped that this protocol will be utilized in long term care settings to increase quality of life for clients with dementia as well as provide caregivers with increased understanding of the most appropriate methods to treat this client population.

Chapter IV

Cognitive Therapy Protocol

This section describes a cognitive therapy protocol that can be used by OT's to treat dementia patients in long term care settings. The treatment process is described in its entirety beginning with evaluation and ending with the desired outcome of treatment. The treatment process is defined by the Occupational Therapy Practice Framework: Domain and Process (AOTA, 2002).

Evaluation

Occupational Profile

The first step in the evaluation process is to develop an occupational profile. The occupational profile is defined as “information that describes the client’s occupational history and experiences, patterns of daily living, interests, values and needs” (AOTA, 2002). Completing an occupational therapy profile will allow the therapist to develop an understanding of what is important to the client and what types of activities may motivate him or her to participate in intervention.

When evaluating clients with dementia it may be important for the OT to include the family in developing an occupational profile. The reason for this is that the individual affected with dementia may be unable to accurately report necessary information due to memory loss and possible negative behaviors such as, hostility, aggression, agitation, and wandering. Family members can participate in an informal interview to assist the OT in gathering accurate and important information. However if clients are able to participate in this interview it is important to allow them to contribute pertinent information. The following will be discovered during this process:

- What activities of daily living (ADL) components are difficult for the client to complete. This includes bathing, bowel/bladder management, dressing, eating, feeding, functional mobility, personal device care, hygiene/grooming, sleep/rest, and toilet hygiene.

- What experiences are important to the client? Develop an understanding of the individuals past history. Important items to discover are values, interests, leisure pursuits, employment held throughout the lifespan, and hobbies.

- The OT will determine what cognitive level and mode the client is at utilizing assessments developed for and compatible with the Allen Cognitive Disability Model.

The occupational profile will be developed in the first two treatment sessions. Information will be gathered as part of the evaluation process, which will be completed by the OT, the client, and family members previously involved in the clients care. The following are specific assessments that will be utilized to gather appropriate information to be used when developing goals and intervention strategies.

- The OT will complete a review of the patients chart in order to identify pertinent health problems as well as gather information that the patient or their family may not share.

- Informal interview to obtain past history, experiences, goals, values, beliefs, and interests.

Clients will be assessed based on referrals from staff members directly providing medical care to the individual or based on referrals from the client's physician for occupational therapy services. Clients must be residents of a long term care setting and have a diagnosis of dementia/AD.

Occupational Performance

The second component of the evaluation process is analyzing occupational performance. Occupational performance is defined as “the ability to carry out activities of daily life, including activities in the areas of occupation: basic activities of daily living (BADLs), personal activities of daily living (PADLs), instrumental activities of daily living (IADLs) education, work, play, leisure, and social participation” (AOTA, 2002). The following steps will be taken to examine occupational performance.

- The OT will observe the client getting dressed, toileting, and eating in order to discover the most appropriate ways to assist the person in completing these tasks as independently as possible. This information can also be gathered by interviewing family members and other individuals responsible for the care of the individual.
- Allen’s Cognitive Disability Model will be used. The client will complete the ACL and an ADM, specifically the placemat activity provided in the ADM, in order to determine each individual’s approximate cognitive level. Secondly depending on severity of cognitive disability he or she will also participate in all tasks provided by the CPT to examine the individual’s ability to problem solve and reason.
- Assessment data will then be used to create goals to increase quality of life for the client. Goals will be created utilizing the *Understanding Cognitive Performance Modes* (Allen, Blue, and Earhart, 1995). Appendix C describes cognitive modes that will be seen in long term care settings and the capabilities expected for each one. Goals will also be created based on observation data generated.

Intervention

Intervention Process

The intervention process can be divided into three steps. These steps are (1) intervention plan, (2) intervention implementation, and (3) intervention review. During the intervention process data from the assessment process is incorporated with theory, frames of reference, and evidence gathered during the evaluation process, is coupled with clinical reasoning to develop a plan and carry it out (AOTA, 2002). Ideally the intervention process would be based on the client's priorities; however it is important to consider that a majority of clients will be placed in a long term care setting due to being unable to safely care for themselves. Therefore it may not be possible to honor each client's priorities or goals due to limited resources and space. Interventions are developed to address deficiencies in performance skills, patterns, contexts, activity demands, and client factors (AOTA, 2002).

Interventions are developed in order to encourage participation in desired occupations and activities that support involvement in daily life. The following intervention approaches will be used to treat individuals affected with dementia. Approaches were chosen based on compatibility with Allen's Cognitive Disability Model.

- Maintain – “An intervention approach designed to provided the supports that will allow clients to preserve their performance capabilities that they have regained, that continue to meet their occupational needs, or both. The assumption is that without continued maintenance intervention, performance would decrease, occupational needs

would not be met, or both, thereby affecting health and quality of life (AOTA, 2002, p. 627).

- Modify – “An intervention approach directed at finding ways to revise the current context or activity demands to support performance in the nature setting... [includes] compensatory technique, including enhancing some features to provide cues, or reducing other features to reduce distractibility (AOTA, 2002, p.627).

- Prevent – “An intervention approach designed to address clients with or without a disability who are at risk for occupational performance problems. This approach is designed to prevent the occurrence or evolution of barriers to performance in context. Interventions may be directed at a client, context or active, variables (AOTA, 2002 p.627).

The intervention approaches described above are appropriate to use with Allen’s Cognitive Disability Theory because this theory does not assume that patients will recover from dementia or any other cognitive dysfunction. The above interventions allow clients to move within Allen’s cognitive levels, while supporting the notion that clients will not demonstrate drastic improvement with treatment. The intervention approaches are also appropriate for dementia patients who reside in long term care settings due to the fact that their functional level is not going to improve. As dementia progresses it becomes increasingly important to maintain, prevent, and modify, treatment.

The OT will also need to choose appropriate intervention types that correspond with Allen’s Cognitive Disability Theory. The following are the types of interventions that will be utilized while treating individuals who are affected with dementia.

- Preparatory Methods – “Prepares the client for occupational performance. Used in preparation for purposeful and occupation- based activities” (AOTA, 2002, p. 628).

- Purposeful Activity – “Allows the client to engage in goal directed behaviors or activities within a therapeutically designed context that lead to an occupation or occupations (AOTA, 2002, p. 628).

- Occupation-based Activity – “Allows clients to engage in actual occupations that re part of their own context and that match their goals” (AOTA, 2002, p.628).

The intervention types listed above are appropriate to use with Allen’s Cognitive Disability Model because they allow the client to participate in goal directed activity that is appropriate for each individual’s cognitive level. The intervention types listed are also appropriate to use in a long term care setting because they provide the client with activities that allow them to practice skills that they may use in their context. Clients will also be able to practice the skills that they learn such as adaptive dressing techniques, transfers, and naming family members that are in a memory book. The intervention types listed above will provide the client with experiences that are important to them, reflect the goals that have been developed, and allow the client t utilized their new skills in daily occupations.

The OT will be responsible for evaluating, developing, and implementing treatment plans. Treatment sessions will be provided three times per week for 30-60 minutes depending on client fatigue and cognitive functioning. Treatment will be provided until no further gain is observable or when a maintenance program has been developed. Once the client has been discharged from OT services restorative nursing will implement exercise programs, and dementia care staff will be responsible for

implementing any further treatment. Various other disciplines will be part of the treatment plan in order to maintain current skill level as well as to decrease the chance of a functional decline.

Intervention Plan

The first step in the intervention process is developing a plan that is based on the results of the assessment information. This includes developing goals that are appropriate for the client with dementia. As stated previously Allen's Cognitive Disability Model will be used to develop goals and plan intervention approaches. The main goal of this protocol is to maintain as much function as possible as well as modify, compensate, and adapt environments and activities based on each client's cognitive level.

Intervention goals will be determined from information gathered during the evaluation stage, by examining functional capabilities associated with the client's approximate cognitive level, from the client's values, interests, and beliefs. Each individual's performance skills will be observed. These include motor skills, process skills, and communication skills. It will also be helpful to gain an understanding of the type of habits each person has, such as useful habits, impoverished habits, and dominating habits. In order to develop more client centered goals the OT should also examine the client's roles and routines that make up their daily activities (AOTA, 2002).

When developing goals and intervention strategies the client's context(s) also need to be addressed. These include cultural beliefs, physical environment, social environment, person attributes, spiritual beliefs, temporal aspects of occupations, and the virtual environment (AOTA, 2002). Information that is gathered during the evaluation process that relates to these areas will be incorporated into treatment sessions by

choosing activities that go along with the client's values and beliefs. For example if family is important to the client they may attend treatment sessions once a week or a craft activity such as a memory book will be utilized in order to include the family in treatment interventions. It is important for the OT to include the above mentioned components into treatment interventions and planning so that goals and treatment remains client centered. This information will also allow the OT to better understand their clients and what they hope to achieve throughout the intervention process.

When examining the previous areas as well as each individual's values, goals, and beliefs, the OT is provided with a holistic perspective of the client with dementia. This will make goal development easier by allowing the OT to incorporate things that are of importance to the person. By understanding important aspects of the individuals life OT's can value cultural beliefs, and spiritual beliefs, which may also be incorporated into interventions.

Intervention Implementation

The second step in the intervention process is putting the plan into action by developing activities that best fit the client. Intervention implementation is defined as "the skilled process of effecting change in the client's occupational performance, leading to engagement in occupations or in activities to support participation" (AOTA, 2002, p.27). The following section provides suggested treatment approaches to be used for clients suffering from dementia. Note that activities will need to be adapted to be appropriate for various cognitive levels.

► ADL Routine – The OT will assist the patient and staff in developing and ADL routine that is the most appropriate for the client. This routine will include developing

appropriate transfer methods, level of verbal cues needed to complete task and the level of assistance needed to complete tasks. The OT, client, and staff may have to discuss, demonstrate, and practice with simulated devices in order to provide the client with the most comprehensive and client centered program possible (Macdonald, 1986).

ADL Treatment Objectives:

1. Develop morning dressing routine.
2. Develop grooming and hygiene routine.
3. Develop bowel and bladder management schedule.
4. Introduce adaptive equipment if appropriate.

► **Reminiscing Group** – This group will consist of discussing past historical events such as Pearl Harbor, JFK assassination, Vietnam, and the first man to walk on the moon. This group can also include naming familiar objects such as brush, comb, fork, and spoon. Individuals in the group will also be asked to state their name. Reminiscence groups ask the person to remember their past and requires some insight (Robichaud et al., 1994). For this reason it is suggested that only clients with cognitive levels between 3.0 - 6.0 participate.

Reminiscing Group Objectives:

1. Group members will discuss past historical events.
2. Group members will name common objects found in their daily routines.
3. Group members will state their name at the beginning of each group.

► **Craft Activities** – Individuals who participate in this intervention will be asked to complete craft activities in order to observe attention span, problem solving, the ability to recall directions, and sequencing. Craft activities can come from the ADM and can be

supplemented with activities developed independent from the ADM, such as completing a memory book of family and friends. Application will be dependent upon the cognitive capacity of the client.

Craft Activity Objectives:

1. Client will complete one activity from the ADM to reassess cognitive levels once a month.
2. Client will complete an activity independent from the ADM that can be utilized to recall past experiences.

► Reality Orientation Group – This group will occur each morning. The OT or other dementia care staff will orientate the staff to the current month, day, year, season, and weather (Spector, et al., 2000). Clients will be asked if they know the answer to the questions being asked. At the end of the group the leader will restate the month, day, year, season, and the weather. Visual aids will also be used to supplement the information presented. Staff will also discuss current events.

Reality Orientation Group Objectives:

1. Clients and staff will discuss current events.
2. Staff will state the day, month, year, season, and the weather outside to clients.

► Exercise/Movement Activity – This activity can be completed in a group or individually. The OT can utilize a parachute to develop activities for a group such as placing a ball in the middle of the parachute and having the clients attempt to keep it on the parachute. Clients may also participate in a balloon volleyball game, which requires them to scan an object and reach. Balloon volleyball can also be completed on an

individual basis. Individual activities include having the clients tolerate simple therapand exercises, pulley activities, dowel and weight exercises, and kicking a ball.

Exercise/Movement Activity Objectives:

1. Provide clients with activities to increase awareness of surroundings though sensory stimulation.
2. Allow client to do range of motion exercises to decrease the risk of contractures.

► Caregiver Education – The OT will provide dementia care staff with strategies to lessen care giving burdens. In-services will be provided and handouts will be given to each staff member fro each client. Handouts will be specific to each cognitive level (see Appendix D). In-service topics will include information about dementia and the Cognitive Disability Model. It is not the goal of this protocol of the Cognitive Disability Model to increase client’s cognitive levels.

Caregiver Education Objectives:

1. Educate dementia care staff on appropriate ways to interact with clients.
2. Provide one in-service a month about dementia and the Cognitive Disability Model.
3. Decrease the burden of caregiving care giving tasks by provident education on dementia and appropriate interaction techniques.

Outcomes Process

The goal of this treatment protocol is to provide OT’s with ideas on how to provide better services and approaches to treating an individual with dementia. Have client’s negative behaviors been decreased? Are dressing routines completed efficiently

with the client participating as much as possible? It is not the goal or expectation of this protocol or the Cognitive Disability Theory to increase the client's cognitive level of functioning.

At this stage it is important to re-evaluate the client to see if there has been a change in his or cognitive status. It is beneficial to have the client complete a second placemat from the ADM and compare their functioning. However, it is important to remember that clients will fluctuate day to day on how well they are thinking and processing information.

Expected Outcomes

“Outcomes are defined as important dimensions of health that are attributed to interventions, including ability to function, health perceptions, and satisfaction with care”. OT's goal is to “increase engagement in occupation to support participation” (AOTA, 2002).

Engagement in Occupation

The expected outcomes that this protocol accomplishes are enhancing occupational performance to adapt current skill level and/or prevent potential problems from occurring. Treatment outcomes should be adapted to an individual's usual response in the areas of occupation. It is desired that treatment interventions will promote a healthy lifestyle in the organization structure of the long term care setting (AOTA, 2002)

Participation

It is expected that through the use of this protocol that individuals affected with dementia will be able to effectively perform activities that their role requires. Client's

quality of life should also improve if adaptations are made to the activities that are completed by each person.

CHAPTER V

Summary

This scholarly project was designed utilizing professional OT resources to describe appropriate interventions that may be used to treat clients with dementia. The author developed a protocol that can be utilized by entry level as well as experienced therapists to provide holistic treatment options. Allen's Cognitive Disability Model provides professionals with knowledge about predicted cognitive levels that can be used to treat patients in the most appropriate way. The cognitive levels can also be utilized to provide caregivers with ideas on how to approach clients with dementia. The goal of this project is to provide a more holistic approach to treatment, increase the quality of life of dementia clients, and to provide guidelines to practicing OT's on possible treatment options.

Limitations of this approach may be that ADLs are not addressed comprehensively due to the more specific focus on cognition. A second limitation is that in order to utilize Allen's Cognitive Disability the OT may require increased training and knowledge to use the theory appropriately. Further research may be needed to fully understand the therapeutic affects of the Cognitive Disability Model.

Appendix A

Stages of Dementia

Stage	Description
Stage I: Very mild to mild cognitive decline	<ul style="list-style-type: none"> ■ Feels loss of control, less spontaneous; may become more anxious and hostile if confronted with losses. ■ Mild problems with memory and less initiative; difficulty with word choice, attention, comprehension need for repetition at times; conversation more superficial; mild problems with gnosis or praxis may be first be noticed. ■ Socially and physically seems intact except to intimates, job performance declines.
Stage II: Mild to moderate decline	<ul style="list-style-type: none"> ■ Use of denial, labile moods, anxious or hostile at times; excessive passivity and withdrawal in challenging situations; paranoia may develop ■ Moderate memory loss with some gaps in personal history and for recent or current events; concentration decreases; may lose valued objects; difficulty with complex information and problem solving; difficulty learning new tasks; visuospatial deficits more apparent ■ Need for supervision slowly increases; decreased sociability; moderate impairment in IADL that are complicated and mild impairment in some ADL; no longer employed; complicated hobbies dropped

Appendix A (continued).

Stage	Description
Stage III: Moderate to moderately severe decline in cognition	<ul style="list-style-type: none"> ■ Reduced affect, increased apathy; sleep disturbances; repetitive behaviors; hostile behavior; paranoia, delusions, agitation and violence may surface if overwhelmed ■ Progressive memory loss for well known material; some past history retained; unaware of most recent events; disorientation to time and place and sometimes extended family, progressively impaired concentration; deficits in communication severe; apraxia and agnosia more evident ■ Slowed response, impaired visual and functional spatial orientation. ■ Unable to perform most IADL; in ADL, assistance eventually needed with toileting, hygiene, eating, and dressing, urinary and fecal incontinence begins, wandering behavior
Stage IV: Severe cognitive decline and moderate to severe physical decline	<ul style="list-style-type: none"> ■ Memory impairment severe, may forget family member name but recognizes familiar people; can become confused even in familiar settings ■ Gait and balance disturbances, difficulty negotiating environmental barriers, generalized motoric slowing ■ Often unable to communicate except for word or grunt; psychomotor skills deteriorate until unable to walk; inability to eat; nursing home placement often occurs at this time

Note. From *Occupational Therapy: Practice Skills for Physical Dysfunction* (p. 709-711), by Gologoski, C., 2001, St.

Louis: Mosby. Copyright 2001 by Mosby, Inc.

Appendix B

Medbox Task

The medbox task was recently added to the CPT. The reason for this was due to an increased concern with client's ability to safely manage medications. Adverse drug events, medication over or underadherence and noncompliance are common issues. In Geriatrics these problems are associated with poor cognition, dementia, living alone, and having three or more medications (Burns, 2002).

The medbox task asks that patient follow directions on four bottles of dummy medications and set up two pill boxes appropriately for one week. Each set of directions on the four bottles varies in difficulty and the pillboxes are added to increase the complexity of the task. Administration of the medbox task involves giving cues to assess the client's ability to identify inaccurate set up and correct errors. Reducing the number of bottles lowers the complexity of the task (Burns, 2002).

Appendix C

Description of Cognitive Modes

Description 1.0-1.2

100% Cognitive Assistance: The person requires 24 hour nursing care to turn the body to prevent pressure sores and hook up artificial feeding tubes. Total cognitive assistance is required to position, bathe, and clothe the person who is bedridden. A response to sensory stimulation maybe obtained through any of the sense. Sensory stimulation can be provided by using cues that are strong, distinctive, and relevant to the person's functional history.

100% Physical Assistance: One or more people are necessary to perform all physical activities.

Description 1.4-1.6

96% Cognitive Assistance: The person needs 24 hour nursing care in order to feed a soft die, position on bed pan, check for pressure sores, bathe, and groom. Sensory stimulation is suggested to capture the person's attention.

100% Physical Assistance: The individual requires assistance of one or more persons with most activities.

75% Physical Assistance: Assistance is required with eating and oral hygiene and bed positioning.

Description 1.8

88% Cognitive Assistance: Individuals at this level need 24 hour nursing care to self feed, engage in exercise, bathe and groom.

Appendix C (continued)

88% Cognitive Assistance: Individuals need assistance to place cups and spoons in hands and establish a routine for voiding and bathing. Sensory stimulation will allow arm movements but trunk balance is not dependable and the individual may require assistance to remain safe.

50% Physical Assistance: Individual needs assistance to sit up or down, stand, and pivot transfer.

100% Physical Assistance: Individuals at this level need to utilize a wheelchair for mobility with support to sustain an upright position.

Description 2.2

82% Cognitive Assistance: Persons at this level need 24 hour nursing care to sit and stand safely or prevent standing if weight bearing is not tolerated.

82% Maximum Cognitive Assistance: Individuals at this level need assistance to initiate and sustain self care tasks. Touching and naming parts of the body decreases the burden of care required. Individual choices for the way things feel to person can be honored.

15% Cognitive Assistance: Individuals require assistance to maintain balance when changing positions from sit to stand and sustain positions while getting dressed, bathed, and groomed. Lap tray or table may be used for support when seated in a chair with solid arms. Bed rails are required to prevent the client from rolling out of bed.

Appendix C (continued)

Description 2.4

78% Cognitive Assistance: Individuals require 24 hour nursing care in order to prevent wandering off and becoming lost and to ensure safe toileting, bathing, and grooming.

78% Maximum Cognitive Assistance: Persons at this level need assistance to initiate and sustain self care activities and prevent falls. Client will ambulate in indicated direction for ADLs, and is able to indicate choice for large, rhythmic body movements.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are utilized for ADLs. Alarms or physical are required to prevent wandering away and getting lost. Individuals should not attempt to walk on surfaces that are not flat. Bed rails are needed to prevent the client from climbing over top.

Description 2.6

74% Cognitive Assistance: Individuals need 24 hour nursing care to guide ADLs, point out stairs and curbs, assist with toileting, grooming, bathing and dressing. Individual choices of where person wants to ambulate to may be honored.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are utilized for ADLs. Alarms or physical barriers are required to prevent wandering away and getting lost. Individuals should not attempt to walk on surfaces that are not flat. Bed rails are needed to prevent the client from climbing over top.

Appendix C (continued)

Description 2.8

70% Cognitive Assistance: Individual needs 24 hour nursing care to provide assistance with bathing, grooming, dressing, and to ensure that objects are used for support.

70% Maximum Cognitive Assistance: Individuals need assistance to observe stairs, edge of tub, provide food, and to bathe. Individual can make choices about the type of support needed, which may include grab bars, rails, and counters.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are utilized for ADLs. Physical barriers are required to prevent wandering away and getting lost. Individuals should not attempt to walk on surfaces that are not flat. Bed rails should be put down to prevent the client from climbing over top.

Description 3.0

64% Cognitive Assistance: Individuals at this level require 24 hour nursing care to place safe objects in front of the person. Assistance is required with toileting, bathing, grooming and dressing.

64% Moderate Cognitive Assistance: Assistance is required to obtain and sustain habits for self care. Individual choices for handling objects may be honored.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are utilized for ADLs. Physical barriers are required to prevent wandering away and getting lost. Individuals should not attempt to walk on surfaces that are not flat. Bed rails are put down to prevent the client from climbing over top.

Appendix C (continued)

Description 3.2

60% Cognitive Assistance: Assistance is required to obtain and sustain habits for self care. Individual choices for handling objects may be honored.

60% Moderate Cognitive Assistance: One to one supervision requires this amount of assistance to maintain actions. Individual choices on what the person likes may be honored.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are used to complete ADLs. Physical barriers or alarms are required to prevent the client from getting lost and attempting to walk on surfaces that are not flat. Bed rails should be put down to prevent the client from attempting to climb over the top.

Description 3.4

54% Cognitive Assistance: Individuals at this level need 24 hour nursing care to sequence the steps of toileting, bathing, grooming, and dressing.

54% Moderate Cognitive Assistance: Assistance is required to move to the next step in self care activities. Individual choices for repetitive actions that individuals enjoy can be honored.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are used to complete ADLs. Physical barriers or alarms are required to prevent the client from getting lost and attempting to walk on surfaces that are not flat. Bed rails should be put down to prevent the client from attempting to climb over the top.

Appendix C (continued)

Description 3.6

50% Cognitive Assistance: Individuals at this level require 24 hour supervision to supply equipment need for ADLs, sequence the steps of toileting, bathing, grooming, and dressing. Also needs supervision to remove dangerous objects.

50% Moderate Cognitive Assistance: Assistance is required to complete all of the steps in activities and to check results. Individual choices about the effects that repetitive actions have on objects may be honored.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are used to complete ADLs. Physical barriers or alarms are required to prevent the client from getting lost and attempting to walk on surfaces that are not flat. Bed rails should be put down to prevent the client from attempting to climb over the top.

Description 3.8

46% Cognitive Assistance: Individual needs 24 hours supervision to get materials needed for ADLs, to check results, and to remove dangerous objects. Person may think that activities are finished even when the completed product is inadequate.

46% Moderate Cognitive Assistance: Assistance is required to complete self care tasks and ensure safety. Individual choices for using up supplies can be honored.

10% Physical Assistance: Assistance is needed for fine motor actions on all objects that are used to complete ADLs. Physical barriers or alarms are required to prevent the client from getting lost and attempting to walk on surfaces that are not flat. Bed rails should be put down to prevent the client from attempting to climb over the top.

Appendix C (continued)

Description 4.0

42% Cognitive Assistance: Individuals at this level require 24 hour supervision to ensure safety and solve problems due to small changes in routine activities. Person may fix a cold snack or make a sandwich.

42% Minimum Cognitive Assistance: Person requires on-site supervision to recognize and correct dangers. Individual can choose one or two important activities.

8% Physical Assistance: Assistance is required for fine motor actions on all objects associated with ADLs.

Description 4.2

38% Cognitive Assistance: Individuals at this level require 24 hour supervision to remove dangerous objects that are outside of the visual field. Assistance is also needed to solve problems that arise from small changes in the client's environment. Individuals may spend a daily allowance, walk to familiar areas, or follow a simple bus route that is familiar.

38% Minimum Cognitive Assistance: Assistance is required to recognize dangers and correct dangerous in routine tasks.

8% Physical Assistance: Assistance is required for fine motor actions on all objects associated with ADLs.

Appendix D

Caregiver Handouts

Level I Caregiving

- ▶ Learn what physical and functional changes to expect
- ▶ Learn techniques for daily care and comfort
- ▶ Come to accept the end stage of life as the person declines
- ▶ Discuss decisions about care with others you trust
- ▶ Care for yourself and maintain interests and support from others

Level II Caregiving

- ▶ Learn what physical and functional changes to expect
- ▶ Adjust the environment for safety and appropriate stimulation
- ▶ Learn techniques for daily care and potential emergency situations
- ▶ Arrange for others to help with the person's care
- ▶ Care for ones' self and maintain interests and support from others

Level III Caregiving

- ▶ Make sure that the person's care needs are met
- ▶ Use help from others for the persons care
- ▶ Care for one's self and develop interests and support from others
- ▶ Enjoy simple activities with the person

Appendix D (continued)

Level IV

- ▶ Maintain the reassuring, supportive relationship
- ▶ Come to accept the role of caregiver; relinquish interdependency and develop self direction

- ▶ Learn techniques of care giving
- ▶ Learn to care for self

Level V

- ▶ Accept the changes and diagnosis
- ▶ Accepts one's own emotional reactions and seek support
- ▶ Learn about dementia and the changes to expect
- ▶ Set the tone for reassuring, supportive relationship
- ▶ Become more objective in identifying what the person can and cannot do
- ▶ Balance attempts to maintain a reciprocal relationship with the need to begin to assume the caregiving role

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